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EXAMINER

EKONG, EMEM

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/696,066

Applicant(s)

BENCO ET AL.

Examiner

EMEM EKONG

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/29/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 4 is objected to because of the following informalities:

On line 3 of claim 4, an "i" is missing before "information";

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5930700 to David J. Pepper (Pepper) et al. in view of U.S. Patent No. 4277649 A1 to Daniel Sheinbein (Sheinbein).

Regarding claim 1, Pepper discloses a method for managing message units, the method comprising (col.2 lines 62-67):

receiving a list of potential calling parties associated with a subscriber (col. 3 lines 48-51), the list including identification information regarding the listed potential calling parties (col. 3 lines 4-6, col. 3 lines 31-41);

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associating a priority level to each of the listed potential calling parties (col.3 lines 1-3, col. 3 lines 18-30 and col. 3 lines 44-47); and,

screening calls based on at least one of a calling line identification (ANI) and a personal identification code associated with the calls and based on information included in the list of potential calling parties, on the associated priorities (abstract, figures 1,3 and 4,col.1 line 50-col. 2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, col. 5 line 1- col. 6 line 11).

However Pepper fails to disclose screening calls based on a current cost of message units.

In a similar field of endeavor, Sheinbein discloses a method and apparatus for screening telephone calls. Sheinbein further discloses screening calls based on a current cost (cahrge) of message units (col. 1 lines 45-48).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method for managing message unit of Pepper with the teaching of Sheinbein on screening based on current cost of message unit for the purpose of minimizing cost by blocking calls, routing calls to answering service and routing only important calls to subscriber.

Regarding claim 2, the combination of Pepper and Sheinbein discloses the method of claim 1 wherein screening calls comprises: determining that the calling party is not a listed potential caller; and assigning a low priority to the calling party (Pepper, col. 3 lines 18-30).

Regarding claim 3, the combination of Pepper and Sheinbein discloses the method of claim 1 wherein screening calls comprises: determining that the calling party is a listed potential caller; and assigning the priority associated with the listed potential caller to the calling party (Pepper, see figs. 8 and 9, col. 3 lines 18-30 and col. 9 lines 12-30).

Regarding claims 4 and 5, the combination of Pepper and Sheinbein discloses the method of claim 1 wherein screening calls comprises: determining a calling line identification (ANI) associated with the calling party; comparing the calling line identification (ANI) with the identification information of the listed potential calling parties; finding a calling line identification (ANI) in the list of potential calling parties that matches the calling line identification (ANI) associated with the calling party; and assigning a priority level associated with the calling line identification found in the list of potential calling parties to the calling party (Pepper, see figures 12A and 12B, col. 3 lines 18-47, col. 6 lines 12-29, col. 10 lines 47-59, and col. 11 line 51- col. 12 line 20).

Regarding claim 7, the combination of Pepper and Sheinbein discloses the method of claim 1 wherein screening calls comprises: requesting billing information regarding the subscriber from a billing system (Sheinbein, col. 1 lines 42-48, col.2 lines 1-17 and col. 10 lines 9-27).

Regarding claim 9, the combination of Pepper and Sheinbein discloses the method of claim 7 wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding a current cost to the subscriber of air time (Sheinbein, col. 1 lines 42-48 and col. 10 lines 9-24).

4. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Sheinbein as applied to claims 1-5 and 7 above, and further in view of U.S. Patent No. 5826185 to Andrew Wise (Wise) et al.

Regarding claim 6, the combination of Pepper and Sheinbein discloses the method of claim 1 wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the priority level of the calling party is high (Pepper, col. 3 lines 24-26 and col. 9 lines 26-30).

However, the combination fails to disclose wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted.

In a similar field of invention, Wise discloses Cellular phone system wherein the air time use is predetermined. He further discloses wherein screening calls comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted (col.1 line 61- col. 2 line 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper and Sheinbein with the

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teachings of Wise for the purpose of limiting usage and incurred charges.

Regarding claim 8, the combination of Pepper and Sheinbein discloses the method of claim 7 wherein requesting billing information regarding the subscriber from a billing system.

However the combination fails to disclose wherein requesting billing information comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber.

Wise discloses requesting billing information comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber (col. 1 line 50-col. 2 line10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper and Sheinbein with the teachings of Wise for the purpose of knowing the subscriber's availability of air time before routing calls.

5. Claims 10-15 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of U.S. Patent No. 6564047 B1 to Scott Alan Steele (Steele) et al.

Regarding claims 10 and 30, Pepper discloses a method for managing air time, the method comprising(col.2 lines 62-67):

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receiving a list of potential calling parties associated with a subscriber(col.3 lines 1-3 and col. 3 lines 48-51), the list including identification information regarding the listed potential calling parties(col. 3 lines 4-6, col. 3 lines 31-41);

associating a priority level with each of the listed potential calling parties( col. 3 lines 18-30 and col. 3 lines 44-47);

receiving a call request from a calling party directed at user equipment of the subscriber;

determining a priority level associated with the calling party; and processing the call request according to the priority level of the calling party (abstract, figures 1,3 and 4,col.1 line 50-col. 2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, col. 5 line 1- col. 6 line 11).

However Pepper fails to disclose the method of managing air time comprising: determining a current air time ration state associated with the subscriber; and processing the call request according to the current ration state.

In a similar field of endeavor, Steele discloses the method of managing air time comprising: determining a current air time ration state associated with the subscriber; and processing the call request according to the current ration state (col. 5 lines 25-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify method of managing air time of Pepper with the teaching of Steele for the purpose of allowing, forbidding, and limiting communications access with accounts for managing usage air time.



Regarding claim 11, the combination of Pepper and Steele discloses the method of claim 10 wherein determining the priority level associated with the calling party comprises: determining that the calling party is not a listed potential caller; and assigning a low priority to the calling party (Pepper, col. 3 lines 18-30).

Regarding claim 12, the combination of Pepper and Steele discloses the method of claim 10 wherein determining the priority level associated with the calling party comprises: determining that the calling party is a listed potential caller; and assigning the priority associated with the listed potential caller to the calling party (Pepper, see figs. 8 and 9, col. 3 lines 18-30 and col. 9 lines 12-30).

Regarding claims 13, and 14 the combination of Pepper and Steele discloses The method of claim 10 wherein determining the priority level associated with the calling party comprises: determining a calling line identification associated with the calling party; comparing the calling line identification with the identification information of the listed potential calling parties; finding a calling line identification in the list of potential calling parties that matches the calling line identification associated with the calling party; and assigning a priority level associated with the calling line identification found in the list of potential calling parties to the calling party (Pepper, see figures 12A and 12B, col. 3 lines 18-47, col. 6 lines 12-29, col. 10 lines 47-59, and col. 11 line 51- col. 12 line 20).

Regarding claim 15, the combination of Pepper and Steele discloses The method of claim 10 wherein determining the current air time ration state associated with the subscriber comprises: determining a remaining air time allocation period fraction associated with the subscriber; determining a remaining air time allocation fraction associated with the subscriber; determining a remaining air time allocation period to air time allocation fraction ratio associated with the subscriber; and, determining the current air time ration state based on the air time allocation period to air time allocation fraction ratio (see table 1, col. 1 line 5- col. 2 line 24, and col. 5 line 10- col. 6 line 2).

6. Claims 16, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Steele as applied to claim 10 above, and further in view of Wise.

The combination of Pepper and Steele disclose the method of claim 10 wherein processing the call according to the priority level and completing the requested call to a mobile device of the subscriber if the priority level of the calling party is high; and connecting the calling party to a message service if the priority level of the calling party is low (Pepper, col. 3 lines 24-30).

However the combination fails to disclose wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a function of remaining allocated air time in an air time allocation period and connecting the calling party to a message service if the current ration state is at a maximum restriction.

Wise discloses wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a function of remaining allocated air time in an air time allocation period (col. 1 line 61-col. 2 line 10 and col. 3 line 15-col. 4 line 44);

the current air time ration state associated with the subscriber comprises: determining a current time associated with the subscriber; determining a remaining air time allocation associated with the current time; and, determining the current air time ration state as a function of the remaining air time allocation (col. 1 line 58-col. 2 line 10, col. 3 line 15-col. 4 line 44);

processing the call according to the current ration state comprises: completing the requested call to a mobile device of the subscriber if the current ration state is unrestricted and connecting the calling party to a message service if the current ration state is at a maximum restriction (col. 2 lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper and Steele with the teaching of Wise for the purpose of calculating and knowing allotted air time versus available air time in order to appropriately route calls to subscriber at no additional cost.

7. Claims 17, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Steele as applied to claims 10 above, and further in view of Sheinbein.

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Regarding claim 17, the combination of Pepper and Steele discloses the method of claim 10.

However the combination fails to disclose wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a current subscriber cost of air time.

Sheinbein discloses wherein determining the current air time ration state associated with the subscriber comprises: calculating the current air time ration state based on a current subscriber cost (charge) of air time (Sheinbein, col. 1 lines 42-48 and col. 10 lines 9-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper and Steele with Sheinbein for the purpose of minimizing expenses for the subscriber.

Regarding claim 22, the combination of Pepper and Steele discloses the method of claim 10.

However the combination fails to disclose the method wherein determining the current air time ration state associated with the subscriber comprises: requesting billing information regarding the subscriber from a billing system.

Sheinbein discloses the method wherein determining the current air time ration state associated with the subscriber comprises: requesting billing information regarding the subscriber from a billing system (Sheinbein, col. 1 lines 42-48 and col. 10 lines 9-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper and Steele with the teaching of Sheinbein for the purpose of determining billing process before routing calls to the subscriber.

Regarding claim 24, the combination of Pepper, Steele, and Steinbein discloses the method of claim 22 wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding a current cost to the subscriber of air time (Sheinbein, col. 1 lines 42-48 and col. 10 lines 9-24).

8. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Steele as applied to claim 10 above, and further in view of Wise as applied to claim 18 above, and further in view of U.S Patent No. 6745025 B1 to Albert Chow (Chow) et al.

The combination of Pepper, Steele, and wise disclose the method of claim 18.

However the combination fails to disclose the method wherein determining a current time comprises: determining a current day of a week, and a current time of day.

In a similar field of endeavor, Chow discloses time-of-day call forwarding in a wireless centrex services system. Chow further discloses the method wherein determining a current time comprises: determining a current day of a week, and a current time of day (col. 70 line 60-col. 71 line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper, Steele, and Sheinbein with the teachings of Chow for the purpose of only forwarding calls during the day and the time periods where they are no charges.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Steele as applied to claim 10 above, and further in view of Sheinbein as applied to claim 22 above, and further in view of Wise.

The combination of Pepper, Steele, and Steinbein discloses the method of claim 22. However the combination fails to disclose the method wherein requesting billing information regarding the subscriber from a billing system comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber.

Wise discloses requesting billing information comprises: requesting information regarding unused allocated air time from an allotment of air time in an air time allocation period associated with the subscriber (Wise, col. 1 line 50-col. 2 line10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Pepper, Steele, and Sheinbein with the teachings of Wise for the purpose of knowing the subscriber's availability of air time in order to properly route calls without incurring unnecessary expenses.

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10. Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pepper in view of Sheinbein as applied to claim 1 above, and further in view of Wise.

Regarding claim 25, Pepper discloses a system operative to conserve message units for a subscriber, the system comprising: a potential caller list manager operative to receive and maintain a list of potential callers in association with priority levels of the callers, the list being associated with the subscriber; a message unit conserver operative to determine a priority of a calling party based on the list of potential callers and a call processor operative to process a call request of the calling party based on the determined priority of the calling party (abstract, figures 1,3 and 4,col.1 line 50-col. 2 line 60, col. 3 lines 6-9, col. 3 lines 12-63, col. 5 line 1- col. 6 line 11).

However the Pepper fails to disclose a system operative to conserve message units for a subscriber comprising to determine a current message unit ration state based on a current cost of message units to the subscriber; and a call processor operative to process a call request of the calling party based the determined current message unit ration state.

Sheinbein discloses a system operative to conserve message units for a subscriber comprising to determine a current message unit ration state based on a current cost of message units to the subscriber (Sheinbein, col. 1 lines 45-48).

However Sheinbein fails to disclose a system operative to conserve message units for a subscriber comprising a call processor operative to process a call request of the calling party based the determined current message unit ration state.

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Wise discloses a system operative to conserve message units for a subscriber comprising a call processor operative to process a call request of the calling party based the determined current message unit ration state (Wise, col.1 line 61- col. 2 line 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Pepper with the teachings of Sheinbein and Wise for the purpose of proper management and eliminating undesired cost.

Regarding claim 26, the combination of Pepper, Sheinbein and Wise disclose the system of claim 25 wherein the message unit conserver is operative to determine the current message unit ration state based on a current opportunity cost measured in terms of remaining message units from a basic allotment of message units in a message unit allocation period (Sheinbein, col. 1 lines 45-48) (Wise, col.1 line 61- col. 2 line 10).

Regarding claim 27, the combination of Pepper, Sheinbein and Wise disclose The system of claim 25 wherein the message unit conserver is operative to determine a priority of a calling party based on the list of potential callers and to determine a current message unit ration state based on a current cost of message units to the subscriber (Sheinbein, col. 1 lines 45-48) (Wise, col.1 line 61- col. 2 line 10).



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Regarding claim 28, the combination of Pepper, Sheinbein and Wise disclose The system of claim 25 wherein the message unit conserver is operative to request a current message unit billing category associated with the subscriber from a billing system, to receive the current message unit billing category and use the current billing category to determine the current message unit ration state based on a current cost of message units to the subscriber (Sheinbein, col. 1 lines 45-48) (Wise, col.1 line 61- col. 2 line 10).

Regarding claim 29, the combination of Pepper, Sheinbein and Wise disclose The system of claim 25 wherein the message unit conserver is operative to request information from a billing system regarding used message unit in a current message unit billing category from an allotment of message units in the current message unit billing category associated with the subscriber, to receive the information regarding the used message units and use the information regarding the used message unit to determine the current message unit ration state (Sheinbein, col. 1 lines 45-48) (Wise,col.1 line 61- col. 2 line 10).

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to method for managing message units:

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U.S. Pat. No. 5651053 to Peter P. Mitchell (Mitchell)

U.S. Pat. No. 5724406 to Bernard G. Juster (Juster)

U.S. Pat. No. 5751760 to Robert M. Fuller (Fuller et al)

U.S. Pat. No. 5752186 to James E. Malackowski (Malackowski et al)

U.S. Pat. No. 5966433 to Bernard Courville (Courville)


U.S. Pat. No. 6246756 to David J. Borland (Borland et al).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM EKONG whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH FEILD can be reached on 571 272 4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EOE  
07/05/2005

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER